



UNITED STATES DEPARTMENT OF COMMERCE
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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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07/990,985 12/16/92 KLETSCHKA

H 3638

MCANDREWS JR EXAMINER

34M2/0502

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ART UNIT	PAPER NUMBER
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3403

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DATE MAILED 05/02/94

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 3/21/94 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 4-7 & 25-29 are pending in the application.
Of the above, claims — are withdrawn from consideration.
2. ☒ Claims 1-3, 8-24 & 30-39 have been cancelled.
3. ☐ Claims — are allowed.
4. ☒ Claims 4-7 & 25-29 are rejected.
5. ☐ Claims — are objected to.
6. ☐ Claims — are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on —. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on — has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on —, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. —; filed on —.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

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PART III

STATEMENT OF OBJECTIONS AND/OR REJECTIONS

A. Objection Under 35 U.S.C. § 112:

1. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an enabling disclosure. A question is raised with regard to the disclosing of a current carrying solenoid fixed to an impeller means that is free floating. It is unclear how such a current is induced in the solenoid without it being connected to a current source.

B. Rejection Under 35 U.S.C. § 103:

2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under

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this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

(1) As Unpatentable Over Bramm et al. (4944748) In View of Waldron:

3. Claims 4-7 are rejected under 35 U.S.C. § 103 as being unpatentable over Bramm et al. '748 in view of Waldron. '748 discloses a fluid pump having an impeller 62, impeller stabilization means 68 (figure 4) having electromagnets 70, housing magnets (74, 76) and impeller magnets (72, 80), and a housing 44 within which driving means (430, 432) are fixed. '748 does not teach using diamagnets fixed to the impeller to stabilize the impeller, as stated in claims 4-7. Waldron teaches that it is old and well known to use diamagnets in combination with permanent magnet means to stabilize members about desired axes (note abstract). It would have been obvious to one of ordinary skill in the art to replace the stabilization means of '748 with the diamagnet and permanent magnet stabilization means of Waldron. Such a replacement would have been based on reducing weight and volume of the support assembly (col. 2, lines 63-64).

(2) As Unpatentable Over Isaacson et al. In View of Waldron:

4. Claims 25-29 are rejected under 35 U.S.C. § 103 as being unpatentable over Isaacson et al. in view of Waldron. Isaacson discloses a fluid pump having an impeller 10, impeller stabilization means with magnet 24, a housing 44 within which driving means (13, 14) are

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fixed, and a central fixed frame part 30. Isaacson et al. does not teach stabilizing the impeller using diamagnets fixed to the impeller, as stated in claims 25-29. Waldron teaches that it is old and well known to use diamagnets in combination with permanent magnet means to stabilize members about desired axes (note abstract). It would have been obvious to one of ordinary skill in the art to replace the stabilizing means of Isaacson et al. with the diamagnet and permanent magnet stabilization means of Waldron. Such a replacement would have been based on reducing weight and volume of the support assembly (col. 2, lines 63-64).

C. Other Art Cited:

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Forster et al. and Fischell both teach further examples of diamagnetic stabilization means.

D. Remarks:

6. Applicant's arguments with respect to claim 4-7 and 25-29 have been considered but are deemed to be moot in view of the new grounds of rejection.

7. With regard to the objection to the specification above, which was not responded to in the instant amendment, without a clear explanation of how a power source is connected to the solenoid when the solenoid is located on the levitated impeller such references (as in page 15,

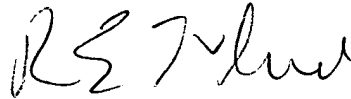
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the second and third to last lines) should be deleted from the specification.

8. Any inquiry concerning this communication should be directed to Roland McAndrews at telephone number (703) 308-0861 or via Fax (703) 305-3463.



**RICHARD E. GLUCK
PRIMARY EXAMINER
GROUP 3400**



Roland McAndrews
April 29, 1994